

## **ABSTRACT OF THE DISCLOSURE**

In a feedback compensation method and a feedback compensator in an acoustic amplification system such as a hearing aid, an adaptive feedback compensation filter generates a compensation signal from the amplified output signal, and one or more filters restrict the frequency range in which the compensation signal is generated. These filters are adaptable with regard to their filter function during the operation of the feedback compensator. The adaptation ensues with an analysis and control unit that checks the frequency range affected by the feedback and adapts the filter functions of the filters to it. The checking ensues, for example, by a comparison of the filter function of the feedback compensation filter with the filter functions of the filters to restrict the frequency range, or with the use of an oscillation detector.

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